CHRISTINE FALLS BRIDGE Mount Rainier National Park Spanning Van Trump Creek on Nisqually Road Longmire Vicinity Pierce County Washington HAER No. WA-48

HAER WASH 27-LONGY 3-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA
REDUCED COPIES OF MEASURED DRAWINGS

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
P.O. Box 37127
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HISTORIC AMERICAN ENGINEERING RECORD

CHRISTINE FALLS BRIDGE Mount Rainier National Park HAER WA-48

HAER Wash 27-Long.y 3-

I. INTRODUCTION

Location:

Spanning Van Trump Creek at Christine Falls on Nisqually Road, 3 miles NE of Longmire, Mount Rainier National Park,

Pierce County, Washington.

Quad: Mount Rainier West, Washington

UTM: 10/593250/5181330

Date of Construction:

1927-1928

Structure type:

Stone-faced reinforced concrete filled

spandrel arch bridge

FHwA Structure No.:

9450-003P

Designer and Engineer:

Western Regional Office, Public Roads Administration, Federal Works Agency, San

Francisco, California

Architectural plans:

National Park Service, Branch of Plans and

Design, San Francisco, California

Contractor:

John D. Tobin, Portland, Oregon

Owner:

Mount Rainier National Park, National Park

Service

Use:

Park highway bridge

Significance:

carries the Nisqually Road over the narrow box canyon of Van Trump Creek at Christine Falls. The graceful stone-faced reinforced concrete spandrel arch bridge contributes to the setting, and is one of the park's most successful examples of the integration of a road-related structure into the environment. The overlook at the

The "rustic style" Christine Falls Bridge

park.

Project Information:

Documentation of the Christine Falls Bridge is part of the Mount Rainier National Park Roads and Bridges Recording Project, conducted in the summer of 1992 by the Historic American Engineering

bridge is one of the most popular in the

Record.

Richard H. Quin, Historian, 1992

II. HISTORY

This is one in a series of reports prepared for the Mount Rainier National Park Roads and Bridges Recording Project. HAER No. WA-35, MOUNT RAINIER NATIONAL PARK ROADS AND 8RIDGES, contains an overview history of the park roads. In addition, HAER No. WA-119, NISQUALLY ROAD, contains more specific information on the road on which the bridge is located.

Nisqually Road

The "Government Road" or Nisqually Road, built by the U.S. Army Corps of Engineers between 1904 and 1915, was the first road constructed in Mount Rainier National Park. It was designed by Eugene V. Ricksecker, a talented civilian engineer for the Corps' Seattle office, and is remarkable for its sensitive relationship to the magnificent park landscape. The road climbs on a steady grade not exceeding 4 percent from Longmire to Paradise, taking in fabulous vistas and providing access to old-growth forest, waterfalls, a retreating glacier, and finally, the lush subalpine meadows of Paradise Valley. Although reconstructed in the 1920s, the road still follows the original route for most of the distance to Paradise. The road is the principal thoroughfare in Mount Rainier National Park and the only park road maintained for winter travel.

The 18.4-mile Nisqually Road begins at the Nisqually Entrance, seven miles east of Ashford, Washington. It is a continuation into the park of the old "Mountain Highway" from Tacoma, now numbered as State Highway 706 outside the park boundaries. After passing the reconstructed "rustic style" entrance arch and log entrance station, the road continues east through stands of enormous old-growth trees, reaching Longmire at mile six. It stays on the northwest side of the Nisqually River and continues northeast to a crossing of Van Trump Creek at the Christine Falls Bridge. From there, the road runs east to cross the Nisqually River at the Glacier Bridge [HAER No. WA-61], then climbs and loops back to the southwest to Ricksecker Point. The main road follows a 1921 cut-off road here; the old road ran around the outer edge of the point. Running generally west again, the Nisqually Road reaches Narada Falls. Here again, the main road now follows the route of another 1921 cut-off road; the old route, which crossed the Paradise River First Crossing Bridge and climbed a series of switchbacks to Inspiration Point, has been abandoned. From Narada Falls, the present road loops through the marshy bogs of Frog Heaven and then turns northwest onto a modern (1958) road segment for the final approach to Paradise Valley. The old road is met again near the Paradise Inn, where it runs east and south as a one-way road, crossing the rustic Edith Creek [HAER No. WA-46] and Paradise River Fourth Crossing [HAER No. WA-45] bridges before dropping to Inspiration Point. For its final segment, the Nisqually Road turns east again to cross the Paradise River Second Crossing Bridge [HAER No. WA-62] and just beyond, a juncture with the old road.

Christine Falls Bridge

The Nisqually Road crosses Van Trump Creek directly in front of Christine Falls on a graceful stone-faced reinforced concrete arch bridge. Motorists are delighted at the sudden appearance of the falls, and are provided with two parking areas at the structure. From the southwest side, a short trail leads down to an overlook offering a lovely vista of the falls framed by the bridge. The 1928 bridge is a particularly successful example of the so-called "rustic style" as applied to bridge design and construction. The structure's facing in rubble granite masonry makes it appear to spring from the solid rock cliffs and appear to be an organic element of the landscape, and the accompanying overlook reflects the landscape architect's careful attention to site planning and detail.

Although James Longmire's hired hand Harry Carter and a crew of workers cleared a rough pack trail to Paradise Valley in 1895, the various streams encountered along the way were apparently crossed only by fords, felled trees, or very primitive bridges. Such was the case at Cynthia Creek, named for a daughter of Philomen Beecher Van Trump, one of the first two climbers of Mount Rainier; the stream was later renamed Van Trump Creek after the climber and early park ranger.

During the construction of the new "Government Road" by the U.S. Army Corps of Engineers, construction crews under the direction of Overseer E. Tivendell erected an overhead hewed timber Howe truss bridge with a 75' span over Van Trump Creek some distance below Christine Falls in the summer or early fall of 1907. A 1909 photograph shows that the bridge stood well away from the rock cliffs downstream in the wooded canyon. The supporting trestle was constructed from sawn timbers and the deck was of sawn planks, but the bridge rail was rustic work of unpeeled logs. Its curved deck offered a view of the falls and helped the structure harmonize with the environment. The structure was considered interesting enough to be featured in scenic views and on postcards. The road was opened as far as the Nisqually Glacier Bridge in 1908, and reached Paradise Valley in 1910, although automobiles were not permitted on the upper stretch of the road for another five years.

In June 1914, Mount Rainier National Park Superintendent Ethan Allen reported that the Van Trump Creek Bridge was in poor condition. Allen ordered repairs to the span, but warned that the structure could not be expected to serve much longer. Two years later, Park Supervisor Dewitt L. Reaburn reported that the bridge had been condemned on account of severe decay in the timber truss work. A new bridge was being built a little farther up in the box canyon closer to the falls. This construction required considerable excavation work.

The replacement span was a 55' wooden deck bridge. It was built of peeled cedar logs, with six stringers supported by a middle bent. The deck and railing were salvaged from the old bridge and recycled. Total cost of the structure was \$2,741.37. The old bridge remained in place until 3 June 1920, when, having been judged an eyesore, it was dismantled and burned.

Increasing traffic use and the resulting deterioration of the road led the National Park Service to begin reconstruction efforts in the early 1920s. As part of the project, Nathan W. Morgan, Bridge Engineer for the NPS Engineering Division, produced a design for a new Christine Falls Bridge in 1925. This was to be a straight arched reinforced concrete bridge with articulated abutments and a clear span of 50'. The plans called for a 20' roadway, and the exposed concrete was to be colored to match the granite cliffs. NPS Assistant Landscape Engineer Thomas C. Vint approved the design for the bridge, but suggested that the handrail for the observation bay be changed to a straight line, rather than curving into the cliff as proposed in the original plans. Another change had to be made when it was found that the survey measurements were incorrect due to tracing from drawings that had shrunk somewhat; this resulted in a larger curve than could be accommodated on the approach, and the site plans had to be adjusted.

The Park Service issued a contract for the construction of the bridge in 1925 to the Tillamook, Oregon firm of Feldschau and Chaffee. 10 The Christine Falls Bridge was part of a large contract including the construction of four other concrete arch bridges, two log stringer bridges, and several culverts. However, due to budget restraints, the Park Service had to postpone the construction of the Christine Falls Bridge and the nearby span over the Paradise River at Narada Falls. On 17 August 1926, the Comptroller General omitted the work from the contract. (As it turned out, numerous problems

were encountered with Feldschau and Chaffee on the construction of the other structures. Mr. Feldschau had problems, too; he was killed on the project.)

While the project was suspended, the Bureau of Public Roads took over construction supervision for the work in progress on the Nisqually Road. On 19 December, BPR District 1 Engineer C. H. Purcell proposed to NPS Acting Chief Engineer Bert H. Burrell that the plans for the bridge be changed to a curved structure, in order to avoid sharp curves at each end of the straight bridge. 12

In February 1926, the Bureau of Public Roads issued a new plan for a curved concrete span, otherwise of similar design. The new plans were for an arched concrete girder span with pronounced end pylons and a clear span of 56'. 13 Burrell forwarded the plans to Daniel R. Hull, Chief of the NPS Landscape Engineering Division in February 1926, indicating that all work on the Nisqually Road would be turned over to the BPR that month. Hull wrote back, approving the design, remarking "I like the looks of this bridge design very much and with proper coloring and cement finish it should be a very fine looking structure." 14

However, the National Park Service Landscape Engineering Division subsequently reconsidered the use of an exposed concrete structure for this picturesque site. The attractive small stone-faced reinforced concrete arch bridges on the upper part of the road in Paradise Valley had proved satisfactory, as had a larger and bolder stone-faced structure recently completed in Yosemite National Park [Yosemite Creek Bridge, HAER No. CA-102]. Similar bridges were being contracted in Glacier National Park, and the Division decided to employ stone-faced concrete arch bridges at Christine Falls and Narada Falls, and soon afterwards, on the future park roads. On its recommendation, the BPR prepared a new design for a concrete structure with stone-faced walls and a masonry parapet.

A conference was held in the BPR district office at Portland on 12 and 13 April 1927 to plan for the coming season's work. Participants were Park Superintendent Tomlinson, BPR District Engineer C. H. Purcell, and NPS Landscape Engineer E. A. Davidson. The three discussed certain changes in the upper section of the road, including the type of bridge to be constructed at Christine Falls.¹⁵

The Bureau of Public Roads completed the plans for a reinforced concrete barrel arch bridge with rubble masonry spandrel and wing walls in June 1927. 16 (Architectural plans, giving details for the rubble masonry facing, were probably prepared by the NPS Division of Landscape Architecture, but copies were not located in the Mount Rainier National Park engineering files.) Following approval of the plans and specifications by the National Park Service, the Department of the Interior authorized the advertisement for its construction in conjunction with the Paradise River First Crossing Bridge.

The joint contract for the two bridges was let on 22 July 1927. The award went to John D. Tobin of Portland, Oregon, who bid \$22,468 for their construction. The contract was formally executed by the Department of the Interior on 6 August 1927.¹⁷

The BPR specified details for the temporary bridge across the creek. It was to be a three-span log stringer trestle supported by wooden bents. Total length of the structure, which was to be constructed downstream of the new permanent bridge, was 75'. The deck was to be built from rough lumber and the bridge rail was to be constructed with three series of horizontal 3" x 8" wooden planks attached with spikes to 6" x 6" posts. 18 Although the BPR allowed the contractor the option of submitting an alternate design for the

temporary bridge, construction photographs show the structure was built according to the BPR plans. Construction of this detour bridge required the removal of a large rock hump near the southern end of the bridge. The rock was quarried and later used for the masonry facing and for the construction of retaining walls at either end of the permanent bridge. ¹⁹

BPR engineers estimated the following quantities of materials would be required for the new bridge's construction:

As these quantities were only estimates, it is probable that alterations had to be made due to field conditions.

National Park Service Landscape Architect Ernest A. Davidson supervised the contractor's crews in the placing of the masonry. The construction drawings provide some information on this phase of the work. The arch ring stones or voussoirs were to be specially selected and fitted into place. All other stones were to be laid with the longest surface horizontal. No more than 10 percent of the stones used in the facing were to be the same size, but there was to be no sharp contrast in the size of adjacent stones. No four-cornered joints were to be permitted. Cap stones for the bridge rail were to extend the full width of the rail. Care was to be taken to use weathered stones for the facing so that the bridge might "present a rugged appearance." Joints were to be raked \(\frac{1}{2} \)" deep. \(\frac{1}{2} \)

The structural reinforcement consisted of square deformed bars of mild openhearth steel. Top and bottom bars for the arch ring were 1" diameter. Longitudinal bars were also 1" in dimension and were spaced on 10" centers. Latitudinal bars were $\frac{1}{2}$ " square and spaced on 24" centers. Wherever the masonry and the concrete met, the stones were bonded to the concrete with 6-gauge hooked soft iron cramps. 23

All concrete used was Class "0," a 1:2:3 mix. Exposed corners were chamfered except for the nose of the curve which was rounded. First, the concrete was poured for the abutments. Next, the arch ring stones were erected on timber falsework. After this, the arch crown and the haunches were poured, and finally the beveled construction keys between the latter two sections.

Once the concrete had been poured and cured, a membrane waterproofing was applied to all surfaces that would come in contact with the masonry. The broken face masonry spandrel walls and wing walls were then erected, and the spandrel fill was then applied to subgrade level. Curbstones were then set for a 2'll sidewalk on the upstream side facing the falls. (This sidewalk has since been eliminated to provide for a wider roadway.) The stone guard walls were erected last; these feature flared ends to help the bridge rail merge into the guard wall for the adjacent parking areas. A crushed rock surfacing was applied under a separate contract. The entire road was subsequently provided with an asphaltic concrete surfacing.

The Christine Falls and Paradise River First Crossing bridges were completed on 20 June 1928 and accepted by the Bureau of Public Roads. Superintendent

Tomlinson called them "very attractive and appropriate for the surroundings," and reported that much favorable comment was being received from visitors.

The Christine Falls Bridge was damaged by floods in the fall of 1940. A rockslide washed out part of the parking area and masonry guard wall downstream from the bridge. Emergency funds were quickly alloted for repairs.25 The old wall had to be removed in order to secure a good foundation for the replacement wall. As much of the parking area had been destroyed, it was necessary to stabilize the slope and to reconstruct the shelf for the new parking lot. At the same time, Emergency Conservation Works personnel installed timber cribbing to stabilize the upper slope above the bridge; they also landscaped the scarred area. The reconstruction plans were prepared by the park resident architect and approved by the NPS Branch of Plans and Design. The new parking area was widened to 30' and separated from the main highway by a 3' flush stone strip (later replaced by a timber guard rail and since paved over). A bituminous asphalt sidewalk separated the parking spaces from the reconstructed masonry parapet.26

Below and to the southeast side of the bridge, a small overlook was constructed, providing a lovely vista of the bridge and the lower falls. rough rail fence serves to define the area, and forms a safety barrier to prevent visitors from clambering about the mossy cliffs around the falls. overlook is reached by a series of stone flag steps leading down from the reconstructed parking area. On the south and downstream side of the bridge, a small observation bay, a projection of the masonry parapet wall, allows visitors to view the upper falls in the narrow box canyon.

An undated drawing for a new "Christine Falls Development" offered plans for a more highly developed pedestrian overlook of the falls. Masonry cheek walls would have lined a paved path to the viewpoint below the falls, and stone guard walls would have replaced most of the existing timber fence.27 These plans were never adopted.

A bridge safety inspection report conducted by the Federal Highway Administration in September 1975 stated the bridge was in "good condition throughout," although deck geometry, the bridge railing, and the approach alignment did not meet current safety standards. The inspector also suggested that a rock outcrop at the end of the bridge be trimmed. The H15 load allowance, capable of supporting two 15-ton trucks, was considered adequate for existing loads.28

The bridge was listed in the National Register of Historic Places in 1990 as part of the multiple resources nomination of historic resources in Mount Rainier National Park.

Description

Christine Falls Bridge is a reinforced concrete three-centered arch structure faced with native granite. The bridge, which measures 56' long by 30' wide, spans Van Trump Creek on a single filled spandrel arch with a 56' clear span. Abutments rest on the solid rock cliff walls of the narrow canyon just below the upper falls. The spandrel and wing walls are broken range masonry, and the arch ring is constructed from large faced granite blocks. The masonry handrail is cambered 6" from the center of the span, and connects with parapet walls extending from the ridge along the road on the downstream sides. The curved span takes excellent advantage of the scenic opportunity of the site, moving in as close as possible to the falls and then curving away; a bridge constructed on a tangent would have interrupted the flow of the road path. On the west side of the bridge, a small observation bay is formed by an extension of the parapet wall. Around the curve to the southeast of the bridge is the

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parking area for the Christine Falls Overlook. The only substantial alteration to the bridge has been the paving over of the original sidewalk to provide extra roadway width; otherwise, the bridge retains its original integrity and has been maintained in a good condition. The structure is located in a mixed conifer forest at an elevation of 3,680'.

III. ENDNOTES

- 1. Report Upon the Construction, Repair and Maintenance of Roads in the Yellowstone National Park, Ernest D. Peek, 1st Lt., Corps of Engineers, U.S.A., in Charge, and Report Upon the Road into Mount Rainier National Park, Hiram M. Chittenden, Major, Corps of Engineers, U.S.A., in Charge: Annual Report of the Chief of Engineers, 1908, Appendixes JJJ and KKK (Washington, D.C.: Government Printing Office, 1908), 2553.
- 2. L. E. Linkletter, "8ridge at Christine Falls, Rainier National Park," photograph, 1909, Collection of Gene A. Nadeau, Tacoma, Washington. Also printed in Annual Report of the U.S. Army Corps of Engineers, 1909, III, 2513. Copy in U.S. Army Corps of Engineers Technical Assistance Library, Portland, OR.
- 3. Ethan Allen, Superintendent, Mount Rainier National Park, Superintendent's Monthly Report, June 1914, 2. MORA Archives Box H2615, Superintendents' Monthly Reports 1913-1919 file.
- 4. Dewitt L. Reaburn, Supervisor, Mount Rainier National Park, Report of the Supervisor of the Mount Rainier National Park to the Secretary of the Interior, 1916 (Washington, D.C.: Government Printing Office, 1916), 54.
- 5. Reaburn, "Work Accomplished in Mount Rainier National Park During October 1916," attached to Supervisor's Monthly Report, October 1916. Typed MSS, MORA Archives Box H2615, Superintendents' Monthly Reports 1913-1919 file.
- 6. Roger W. Toll, Superintendent, Mount Rainier National Park, Superintendent's Monthly Report, June 1920, 4. MORA Archives Box H2615, Superintendents' Monthly Reports 1920-1923 file.
- 7. U.S. Department of the Interior, National Park Service, Engineering Division, "Mount Rainier National Park, Christine Falls Bridge, Nisqually Road," construction drawing 248 (Portland, OR: National Park Service, Engineering Division, 1925). National Archives, RG 79 Entry 26.
- 8. Thomas C. Vint, Assistant Landscape Engineer, National Park Service, to R. N. Kellogg, Associate Engineer, National Park Service, Mount Rainier National Park, telegram, 8 September 1925. National Archives, RG 79 Entry 22 8ox 18, Mesa Verde National Park file.
- 9. Kellogg to Bert H. Burrell, Acting Chief Civil Engineer, National Park Service, Portland, OR, 11 December 1925. National Archives, RG 79 Entry 22 8ox 18, Mesa Verde National Park file.
- 10. U.S. Department of the Interior, National Park Service, "Proposals and Specifications for the Construction of 5 Reinforced Concrete Bridges, 2 Rustic Log Bridges, and Possibly 3 or More Small Reinforced Concrete Culverts Over the Following Streams: Tahoma Creek, Kautz Creek, Christine Falls, Nisqually River (near the Glacier), Paradise River (on the Narada Cut Off), The Fourth Paradise River Crossing, and Edith Creek, and the Culverts at Places to be Designated, Specifications No. 35, in Mount Rainier National Park, Washington," undated contract (1925). National Archives, RG 79, Entry 25 80x 1.

- 11. J. R. McCash, Comptroller General of the United States, to John H. Edwards, Assistant Secretary of the Interior, 17 August 1926. National Archives, RG 79 Entry 26. Feldschau and Chaffee protested that their unit prices were based on the entire contract, and that if the Christine Falls Bridge and other work were to be eliminated, that they should be entitled to higher unit prices for the remaining work. The Comptroller disallowed their request, as the contract specified that unit prices were not to vary if the contract were to be modified. (pp. 2)
- 12. C. H. Purcell, District Engineer, Bureau of Public Roads, Portland, OR to Burrell, 19 December 1925. National Archives, RG 79 Entry 22 Box 1B, Mesa Verde National Park file.
- 13. U.S. Department of Agriculture, Bureau of Public Roads, "Proposed Change of Design for Christine Falls Bridge, Mt. Rainier National Park, Wash., Nisqually Road," construction drawing P-3-13 (Portland, OR: Bureau of Public Roads, District No. 1, 19 March 1926). Engineering Division files, Mount Rainier National Park.
- 14. Burrell to Daniel R. Hull, Chief, Division of Landscape Engineering, National Park Service, Los Angeles, CA, 10 February 1926; Hull to Burrell, 15 February 1926; Hull to Vint, 15 February 1926. National Archives, RG 79 Entry 26.
- 15. O. A. Tomlinson, Superintendent, Mount Rainier National Park, Superintendent's Monthly Report, April 1927, 5. MORA Archives, Box H2615, Superintendents' Monthly Reports 1924-1927 file.
- 16. Bureau of Public Roads, "Christine Falls Arch over Van Trump Creek, Nisqually Road, Longmire Section, Mt. Rainier National Park, Pierce County, Washington;" "General Layout & Temporary Bridge, Christine Falls Arch, Nisqually Road--Paradise Section, Mt. Rainier National Park, Pierce County, Washington," construction drawings P-3-16 & 17 (Portland, OR: Bureau of Public Roads, District No. 1, 16 June 1927). Engineering Division files, Mount Rainier National Park.
- 17. Tomlinson, Superintendent's Annual Report, 1927, 12. MORA Archives, Box H2621, Superintendents' Annual Reports 1926-1932 file; Idem, Superintendent's Monthly Report, July 1927, 4. MORA Archives, Box H2615, Superintendents' Monthly Reports 1924-1927 file; E. C. Finney, First Assistant Secretary of the Interior, Washington, D.C., to J. D. Tobin, Portland, OR, 4 August 1927. National Archives, RG 4B Box 1991 file 12/7.
- 1B. Bureau of Public Roads, "General Layout & Temporary Bridge, Christine Falls Arch, Nisqually Road--Paradise Section, Mt. Rainier National Park, Pierce County, Washington," construction drawing P-3-17 (Portland, OR: Bureau of Public Roads, District No. 1, 16 June 1927). Engineering Division files, Mount Rainier National Park
- 19. See National Park Service, "Proposals and Specifications for the Construction of 5 Reinforced Concrete Bridges...," 2-3.
- 20. See "Approx. Quantities" on Bureau of Public Roads, "Christine Falls Arch over Van Trump Creek, Nisqually Road, Longmire Section, Mt. Rainier National Park, Pierce County, Washington," construction drawing P-3-16 (Portland, OR: Bureau of Public Roads, District No. 1, 16 June 1927). Engineering Division files, Mount Rainier National Park.

- 21. G. Gray, Fitzsimons, Inventory Card for Christine Falls 8ridge. Seattle, WA: National Park Service, Pacific Northwest Regional Office, 17 September 1982.
- 22. See notes on 8PR construction drawing P-3-16.
- 23. Ibid..
- 24. Tomlinson, Superintendent's Monthly Report, June 1928, 6. MORA Archives, 8ox H2615, Superintendents' Monthly Reports 1927-1931 file.
- 25. O. W. Carlson, Acting Superintendent, Mount Rainier National Park, Superintendent's Annual Report, 1941, 3. MORA Archives, Box H2621, Superintendents' Annual Reports 1933-1935 file.
- 26. See U.S. Department of the Interior, National Park Service, Branch of Plans and Oesign, "Reconstruction Parking Area, Christine Falls, Mt. Rainier National Park," construction drawings NP RAI 2059, 2 sheets (Mount Rainier National Park, WA: Park Resident Engineer, May 1941); Idem, "Parking Area Below Christine Falls," construction drawing NP RAI 2171 (Mount Rainier National Park, WA: Park Resident Engineer, July 1964). Engineering Division files, Mount Rainier National Park.
- 27. National Park Service, "Christine Falls Development," undated construction drawing. Engineering Division files, Mount Rainier National Park.
- 28. U.S. Department of Transportation, Federal Highway Administration, *8ridge Safety Inspection Report, Christine Falls Bridge, Mt. Rainier N.P. Structure No. 9450-003P* (Denver, CO: Federal Highway Administration, Region 8 Office of Western Bridge Design, September 1975), 1.

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 - --Burrell to C. H. Purcell, District Engineer, Bureau of Public Roads, San Francisco, CA, 27 February 1926. National Archives, RG 79 Entry 22 80x 18.
 - --Burrell to Stephen T. Mather, Director, National Park Service, Washington, DC, telegram, 25 July 1925. National Archives, RG 79 Entry 22 Box 18.
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 - --Hull to Bert H. Burrell, Acting Chief Civil Engineer, National Park Service, 15 February 1926. National Archives, RG 79 Entry 26.
 - --Hull to Thomas C. Vint, Assistant Landscape Engineer, National Park Service, Yosemite National Park, CA, 15 February 1926. National Archives, RG 79 Entry 22 Box 18, Mesa Verde National Park file.
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 - --Morgan to Burrell, 25 July 1925. National Archives, RG 79 Entry 22 Box 18.
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ADDENDUM TO

CHRISTINE FALLS BRIDGE

Spanning Van Trump Creek on Nisqually Road

Longmire Vicinity

Pierce County

Washington

HAER No. WA-48

Mount Rainier National Park Roads & Bridges

HAER No. WA-48

Mount Rainier National Park Roads & Bridges

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